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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,940	08/21/2003	J. Patrick Thompson	MSFT-1750/302726.01	1753
41505 7590 12/27/2007 WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			EXAMINER LY, CHEYNE D	
			ART UNIT 2168	PAPER NUMBER
			MAIL DATE 12/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/646,940

Applicant(s)

THOMPSON ET AL.

Examiner

Cheyne D. Ly

Art Unit

2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on April 05, 2007; October 07, 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 36-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date July 09, 2007.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 05, 2007 has been entered.
2. Claims 36-70, filed October 07, 2007, as examined on the merits.

### ***Claim Objections***

3. Claims 50-60 are objected to because claim 49 from which claims 50-60 recites a computer implemented method while, claim 50 recite "The computer readable instructions of claim 49." Appropriate correction is required. It is advised that application amend the claim to recite "The method of claim 49." The same issue is present in claims 51-60.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
5. Claims 49-70 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
6. Specific to claims 49-60, it is noted the preamble of claim 49 recites "A computer implemented method", however, the body of the claim explicitly recite the claims being merely "instructions." Specific to claims 61-70, it is noted that the claims are directed to a system comprising means for limitations; however, the instant specification does not define

the “means for” limitation to comprise any hardware structure for performing the claimed functions. Therefore, claims 49-70 lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

7. Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” Both types of “descriptive material” are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)
8. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”).

**CLAIM REJECTIONS - 35 USC § 102**

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 36-42, 48-55, and 61-67 are rejected under 35 U.S.C. 102(b) as being anticipated by Shutt et al. (US 5,905,987A) (Shutt hereafter).

11. In regard to claim 36, Shutt describes a computer implemented method comprising: storing data for one or more applications in a repository (column 9, line 64, to column 10, line 11, e.g. repository), the data stored as objects including content (column 16, lines 41-54, e.g. data values have been interpreted as content), the objects conforming to a base schema that characterizes each object into one or more object types that allows the repository to understand and interpret the content of each object (column 11, line 55, to column 12, line 67, e.g. repository type information and tool information model (schema)...type information is stored by the repository engine for interpretation), wherein the base schema defines object, property base, and extension types, wherein an object type is defined by properties of a foundational object type, the property base type being an anchor from which other property types are derived and through which derived property types are interrelated, and the extension type defines which object an extension extends and identification to distinguish one extension from another (column 11, line 55, to column 12, line 67, e.g. the objects representing the classes, interfaces, properties, collections, and relationships defined in that particular tool information model with interconnections between the above elements being represented by relationships, and column 26, line 65, to column 27, line 47, e.g. extensibility

model);

receiving at least one request from said one or more applications for specific content (column 24, lines 21-33, e.g. access the address book and contact repository, column 25, lines 53-64, e.g. an access request);

and

retrieving one or more objects that include said specific content for said one or more applications (column 24, lines 21-33, e.g. access the address book and contact repository, column 25, line 53, column 26, line 11, e.g. get property method, lines 21-36, e.g. displaying the contact information).

12. In regard to claim 37, Shutt describes the schema further defines at least one base object type including at least one base object type property (column 11, line 55, to column 12, line 67, e.g. from the root object all of the repository type binary objects representing the individual tool information model type definitions...the objects representing the classes, interfaces, properties, collections, and relationships defined in that particular tool information model with interconnections between the above elements being represented by relationships).
13. In regard to claims 38, Shutt describes storing at least one object in said repository, said object being derived from said object type and including said at least one base object type property (column 26, line 65, to column 27, line 19, e.g. a custom object can be extended from the generic repository object).
14. In regard to claim 39, Shutt describes storing said at least one object in said repository, wherein said at least one object extends from said base object type (column 26, line 65, to column 27, line 19, e.g. a custom object can be extended from the generic repository object).

15. In regard to claim 40, Shutt describes said base object type comprises a property that uniquely identifies said object to said repository (column 11, line 55, to column 12, line 67, e.g. the objects representing the classes, interfaces, properties, collections, and relationships defined in that particular tool information model with interconnections between the above elements being represented by relationships).
16. In regard to claim 41, Shutt describes schema defines at least one base property that defines all other properties utilized by the repository (column 10, lines 31-42, e.g. root repository object, and column 7, lines 1-8, e.g. properties are stored, and column 11, line 55, to column 12, line 67, e.g. from the root object all of the repository type binary objects representing the individual tool information model type definitions).
17. In regard to claim 42, Shutt describes said schema defines at least one base relationship type that defines all other relationships utilized by the repository (column 10, lines 31-42, e.g. root repository object, and column 6, lines 59-67, e.g. have binary extensibility through wrapping, and column 11, line 55, to column 12, line 67, e.g. from the root object all of the repository type binary objects representing the individual tool information model type definitions).
18. In regard to claim 48, the base schema further defines a second property type that constitutes a base type for categories (Figure 10, e.g. Property 1...Property N).
19. In regard to claims 49-55 and 61-67, Shutt describes the computer implemented method and system (Figure 2) for implementing the above cited method.

***Claim Rejections - 35 USC § 103***

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
22. Claims 43-47, 56-60, and 68-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shutt et al. (US 5,905,987A) (Shutt hereafter) as applied to claims 36-42, 48-55, and 61-67 above, and further in view of Miloushev et al. (US 20010037412A1) (Miloushev hereafter).

**MOTIVATION TO COMBINE**

23. Shutt describes an improvement to allow easy extensibility of the persistent capabilities to custom objects (column 2, lines 66-67). While, Miloushev describes a system for using composition by extending existing object models rather than defining a new object model (page 4, [0050]). One of ordinary skill in the art at the time of the invention would have been



motivated by Shutt to improve the system of Miloushev to allow easy extensibility of the persistent capabilities to custom objects.

**BASIS FOR PRIOR ART**

24. In regard to claim 43, Shutt describes storing said at least one additional object in said repository (column 14, lines 30-49, e.g. creating two different types of objects), wherein said object includes a containment relationship defined by said schema (column 14, line 35-36, e.g. contains relationship).
25. However, Shutt does not explicitly describe a containment relationship defined by said schema that controls the life-time of another object that is the target of the relationship. Miloushev describes a containment relationship defined by said schema that controls the life-time of another object that is the target of the relationship (page 28, [0535], e.g. upon destruction, assemblies dissolve all contained connections and destroy all subordinate parts). Therefore, it would have been obvious to one of ordinary skill in the art to make and use the system of Shutt with a containment relationship defined by said schema that controls the life-time of another object that is the target of the relationship as described by Miloushev to allow easy extensibility of the persistent capabilities to custom objects.
26. In regard to claim 44, Shutt in view of Miloushev describes storing said at least one additional object in said repository (column 14, lines 30-49, e.g. creating two different types of objects), wherein said at least one additional object is derived from said base object type and said at least one additional object includes a relationship to an object folder derived from said base object type, wherein said object folder being the source of the relationship and said

object is the target of said relationship (column 18, lines 17-39, e.g. collection of relationships...a collection (folder) of object).

27. In regard to claim 45, Shutt in view of Miloushev describes the existence of a containment relationship is indicated by a property field in the source object of the relationship (column 14, line 35-36, e.g. contains relationship).
28. In regard claim 46, Shutt describes the claimed invention except for the limitation of deleting the object that constitutes the source in a containment relationship and in response to deleting the source, deleting any objects that are the targets of the containment relationship. Miloushev describes deleting the object that constitutes the source in a containment relationship and in response to deleting the source, deleting any objects that are the targets of the containment relationship (page 28, [0535], e.g. upon destruction, assemblies dissolve all contained connections and destroy all subordinate parts). Therefore, it would have been obvious to one of ordinary skill in the art to make and use the system of Shutt with deleting the object that constitutes the source in a containment relationship and in response to deleting the source, deleting any objects that are the targets of the containment relationship as described by Miloushev to allow easy extensibility of the persistent capabilities to custom objects.
29. In regard to claim 47, Shutt in view of Miloushev describes configuring said target of the containment relationship to be the target of multiple containment relationships (Figure 5, e.g. Contains Relationship 210, and Figure 7).
30. In regard to claims 56-60, and 68-70, Shutt in view of Miloushev describes the computer implemented method and system (Figure 2) for implementing the above cited method.

### **CONCLUSION**

31. The prior art, Stutz et al. and Duparcmeur et al., made of record and not relied upon is considered pertinent to applicant's disclosure.
32. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.
33. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199. The USPTO's official fax number is 571-272-8300.
34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Dune Ly, whose telephone number is (571) 272-0716. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

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35. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo, can be reached on (571)272-3642.

/Cheyne D Ly/  
C. Dune Ly  
Primary Examiner  
12/14/07